

REMARKS/ARGUMENTS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-3 and 15 are pending in the application. Claims 1-3 are amended; and Claim 15 is added by the present amendment. Support for the amended claims can be found in the original specification, claims and drawings.¹ New Claim 15 recites features similar to amended Claim 1, but is drafted to avoid interpretation under 35 U.S.C. § 112, sixth paragraph. No new matter is presented.

In the Office Action, Claims 1-3 were rejected under 35 U.S.C. § 103(a) as unpatentable over the Jung (U.S. Pat. 6,020,925) in view of Swonger (U.S. Pat. 4,754,490); and Claims 1-3 were rejected under 35 U.S.C. § 103(a) as unpatentable over Kondo (JP 11258472) in view of Kondo (U.S. Pat. 5,576,772, herein Kondo II) and Swonger.

In response to the rejections noted above, Applicants respectfully submit that amended independent Claims 1-3, and new independent Claim 15, recite novel features clearly not taught or rendered obvious by the applied references.

In each of the rejections noted above, the Office Action relied on Swonger as teaching the claimed features directed to “storing position information of each pixel...” Applicants, however, respectfully submit that Swonger fails to teach or suggest the “storing” feature as clarified in each of independent Claims 1-3 and 15.

Amended Claim 1, for example, recites an image processing apparatus for compressing an input image using a motion vector, the image processing apparatus comprising:

means for storing position information of each pixel of a first frame that is earlier in time than a second frame at an address corresponding to a feature value that is based on a value of said each pixel *and a pixel peripheral to said each pixel*, the feature value representing a feature of said each pixel...

¹ E.g., specification, Figs. 5-6 and p. 19, l. 11-p. 20, l. 25.

Independent Claims 2-3 and 15, while directed to alternative embodiments, recite similar features. Accordingly, the remarks and arguments presented below are applicable to each of independent Claims 1-3 and 15.

Turning to the applied reference, Swonger describes a method for linked-list image feature extraction. More particularly, Swonger describes that each pixel within an array of pixels has a pixel value selected from among a plurality of possible pixel values. As the pixels are recalled from the array of pixels in a raster scan fashion, a pixel address memory 115 is incremented to contain a current pixel address indicative of the location of the current pixel. If the current pixel is the first occurrence of its pixel value, the current pixel address is stored in a first occurrence pointer memory 130, and the current pixel address is stored within a last occurrence pointer memory 140 when it is the last occurrence of its pixel value.² Swonger, as cited in the Office Action, also describes a linked-list memory 160 that builds a linked-list in accordance with pixel values of pixels received from a raster scan extractor 30.³

Thus, Swonger describes that each pixel is associated with an address, and that this address may be stored in one or more of a plurality of memories based on a pixel value corresponding to that pixel. In other words, the Office Action appears to interpret the claimed “feature value” as the pixel value, and that the address corresponding to the feature value is one of the first occurrence pointer memory 130, last occurrence pointer memory 140 and/or linked list memory 160.

Claims 1, however, is amended to recite that the position information of each pixel is stored at an address corresponding to “a feature value that is based on ... *a pixel peripheral to said each pixel...*” As described in an exemplary embodiment at p. 19, ll. 10-24, the feature

² Swonger, Abstract and Fig. 1.

³ Id., col. 3, ll. 17-24.

value is based on a value of each pixel *and a pixel peripheral to said each pixel*. Swonger fails to teach or suggest this claimed feature.

Instead, Swonger describes that position information is stored for pixels at an address corresponding only to a pixel value, which does not take into consideration a pixel peripheral to the pixel for which address information is being stored. While Swonger does describe a current pixel address memory 115, which stores the addresses of each of the raster-scanned pixels, the pixel address memory 115 stores the pixel addresses in the order in which they are scanned and not “at an address corresponding to a feature value...,” as claimed.

Further, Jung, Kondo and Kondo II are not relied upon to reject the claimed features directed to the “storing” feature. Moreover, these references fail to cure the above noted deficiency of Swonger.

Therefore, Applicants respectfully submit that Swonger, Jung, Kondo and Kondo II, neither alone, nor in combination, teach or suggest “storing position information of each pixel of a first frame... at an address corresponding to a feature value that is based on a value of said each pixel *and a pixel peripheral to said each pixel*, the feature value representing a feature of said each pixel...,” as recited in amended independent Claim 1.

Accordingly, for at least the reasons discussed above, Applicants respectfully request that the rejections of Claims 1-3 under 35 U.S.C. § 103 be withdrawn. For substantially similar reasons it is also submitted that new independent Claim 15 patentably defines over Swonger, Jung, Kondo and Kondo II.

Consequently, in view of the present amendment and in light of the foregoing comments, it is respectfully submitted that the invention defined by Claims 1-3 and 15 is patentably distinguishing over the applied references. The present application is therefore believed to be in condition for allowance and an early and favorable reconsideration of the application is therefore requested.

Respectfully submitted,

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